Remarks/Arguments:

Status of Claims

Claims 1-16 are pending.

Claims 1-3 stand rejected, while claims 4-16 are withdrawn from consideration.

By this Amendment, claims 1-3 are amended.

No new matter is presented by the claim amendments, and accordingly, entry and approval of same are submitted to be proper and respectfully requested. Support for the claim amendments can be found throughout the specification and, more particularly, in the original specification at page 10, lines 4-19.

Rejection under 35 U.S.C. §103(a)

Claims 1-3 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kang (U.S. Patent No. 6,268,943) in view of Terahara (U.S. Patent No. 6,271,945).

Reconsideration is respectfully requested.

Claim 1

Claim 1 is directed to a light-receiving element array, and recites "a plurality of light-receiving elements for monitoring signals for each of the respective channels, and a plurality of light-receiving elements for monitoring noises for each of the respective channels, wherein the light-receiving elements for monitoring signals and the light-receiving elements for monitoring noise are alternately arrayed in a straight line..." Such an arrangement enables signal and noise monitoring for each of the respective channels, individually.

Kang Reference

Kang discloses that the noise channels are set at both ends of a signal wavelength band that includes signals at multiple channels. More particularly, in the Kang signal-to-noise (SNR) measurer, "two channels present at both ends of a signal wavelength band are designated as noise channels and optical SNRs are measured from two signal channels adjacent to both the noise channels ... a wavelength division demultiplexer 100 is configured to separate the

wavelength division multiplexed optical signal into the two noise channels CH0 and CH(n+1) as well as the signal channels CH1 to CHn." (See Kang at column 4, lines 10-26 and Fig. 3). Further, Kang discloses that "**some** adjacent signal channels within a signal wavelength band may be designated as a noise channel," (emphasis added; see Kang at column 5, lines 33-35). However, Kang is silent regarding the plurality of light-receiving elements for monitoring signals for each of the respective channels, and a plurality of light-receiving elements for monitoring noises for each of the respective channels, wherein the light-receiving elements for monitoring signals and the light-receiving elements for monitoring noise are alternately arrayed in a straight line." That is, the structure disclosed or suggested by Kang (i.e., that either the two end channels or some adjacent signal channels be used for noise monitoring) is different from that of the claimed invention recited in claim 1 (i.e., that signal and noise monitoring elements alternate). The alternation of the noise and signal channels allows a signal-to-noise ratio to be individually determined for each channel of the array.

Terahara Reference

It is submitted that Terahara does not overcome the deficiencies of Kang. Terahara discloses a spectrum monitor using "a photodetecting array 54 having a plurality of opto-electric conversion elements 54A located so as to receive the lights dispersed by light dispersing device 50... A signal processing circuit 56 receives the signals from photodetecting array 54 and detects spectrum peak values of signal lights in all the channels of the WDM signal light." (See Terahara at column 8, lines 1-4 and 18-20.) Moreover, in the Terahara apparatus, an electrical SNR using an electrical SNR monitor, e.g., a Q-factor monitor 116, determines signal-to noise ratios. Terahara, however, is silent regarding measurement of optical signals and optical noise for each respective channel and, furthermore, arraying the signal and noise monitoring elements alternately.

Accordingly, the cited art of Kang and Terahara taken singularly or in any proper combination do not disclose or suggest the recitation in claim 1, and claim 1 is submitted to be allowable.

Claims 2 and 3

Claims 2 and 3 each include all of the features of claim 1 from which they ultimately depend. Thus, claims 2 and 3 are also patentable over the cited art for at least the same reasons as set forth above for claim 1.

Conclusion

Accordingly, Applicants contend that the claims now pending and under consideration are in condition for allowance. Reconsideration and allowance of all these claims are respectfully requested.

Respectfully submitted,

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